CITY OF MILPITAS

ENGINEERING DIVISION

BENCHMARK SYSTEM

February 21, 2002



Point Name	CCS83(1992) Zone 3		Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
308	1988181.077	6169764.275	559.933	Rebar and Towill, Inc cap in the parking area of Spring Valley Pond picnic area, located 48' south of the edge of Calaveras Road, and 3.9' east of wooden barricade in parking area, Ed Levin County Park
309	1988508.796	6170536.680	592.813	Rebar and Towill, Inc cap
310	1990626.079	6166517.034	602.208	Rebar and Towill, Inc cap set in parking area 200' east of Downing Road, 12' north from edge of parking area pavement, 75' SE of "No Swimming Sign", and 150' southwest from dam
311	1991414.863	6165438.300	598.414	2" aluminum Towill disk stamped 311, set in asphalt in driveway to parking lot of Lakeside Picnic Area, located 12' west of east edge of driveway, 10.3' east of west edge of driveway, 40' south of beginning of parking lot, and 80' east of east edge of Downing Road, in the Ed Levin County Park
ABB-CAL			15.077	Brass disk in monument well at intersection, Abbott Avenue and West Calaveras Boulevard
ABB-CHE			7.730	3/4" IP in monument well at intersection, Abbott Avenue and Chestnut Avenue.
ABB-ELM	1984779.674	6150796.746	7.673	3/4" IP in monument well at intersection, Abbott Avenue and Elm Avenue.
ABB-KEN			9.100	3/4" IP in monument well at intersection, Abbott Avenue and Keniston Avenue.
ABB-MAR			8.585	3/4" IP in monument well at intersection, Abbott Avenue and Marylinn Drive.
ABB-RED	1985779.946	6150811.419	8.263	3/4" IP in monument well at intersection, Abbott Avenue and Redwood Avenue.
ABB-SAN			15.886	Brass disk in monument well at C/L San Andreas Drive. 50' + west of C/L Penitencia Creek at beginning of Abbott Avenue.
ABB-SPE			11.912	Brass disk in monument well at intersection, Abbott Avenue and Spence Avenue
ABE-CAP			25.459	Brass disk in monument well at intersection, South Abel Street and Capitol Avenue
ABE-COR	1980170.402	6153038.789	17.124	Brass disk in monument well at intersection, South Abel Street and Corning Avenue eastbound (southerly of two monuments).
ABE-CUR	1977865.192	6153460.606	21.407	Brass disk in monument well at intersection, South Abel Street and Curtis Avenue.
ABE-MAI2 RESET			32.407	Chiseled square
ABE-MAR2			9.514	Brass disk in monument. well at intersection, Abel Street and Marylinn Drive (northerly of two monuments).
ABE-RR			16.039	Chiseled square on top of north concrete wall of Berryessa Creek channel, 1' west of north abutment WPRR bridge over Berryessa Creek.
ABE-SER			15.019	Brass disk in monument well at intersection, South Abel Street and Serra Way.
ALD-BAR	1976246.148	6151252.805	25.770	Brass disk in monument well at intersection, Alder Drive and Barber Lane.

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	Northing	Easting	NGVD29	
ALD-MCC	1976966.613	6148987.760	21.604	Brass disk in monument well at intersection, Alder Drive and McCarthy Boulevard.
AME-MIL			43.162	Brass disk in monument well at intersection, Ames Avenue and South Milpitas Boulevard.
ANN-NPV			73.630	Chiseled square on top of west curb, North Park Victoria Drive, halfway between Princess Place and Ann Place and adjacent to fire hydrant.
ARI-DIX			45.961	Pin in concrete in monument well, Arizona Avenue and Dixon Road.
ARI-WAS			37.797	Brass disk in monument well at intersection, Arizona Avenue and Washington Drive.
AUG-EC			604.368	Brass disk in monument well, C/L E.C. Augusta Court (at cul-de-sac).
AUG-TUL	1992056.810	6162332.064	620.455	Brass disk in monument well at intersection, Augusta Court, Tularcitos Drive, Pinehurst Court and Country Club Drive.
BAR-2			22.866	Chiseled cross in north rim sanitary sewer manhole, 100' + east of C/L Barber Lane, southerly of Hetch Hetchy water line, 0.5 mile + south of Highway 237.
BAR-237			21.278	Brass disk in monument well at cul-de-sac Barber Court
BAR-BC			32.278	Brass disk in monument well at C/L B.C. Barber Lane 780' + east of intersection Barber Lane and McCarthy Boulevard
BAR-BEL	1979364.677	6149826.038	22.924	Brass disk in monument well at intersection, Barber Lane, Barber Court and Bellew Drive.
BAR-EC			33.67	Brass disk in monument well at C/L E.C. Barber Lane 1150'+ east of intersection, Barber Lane and McCarthy Boulevard
BAR-MCC RESET			33.950	Brass disk in monument well at intersection, Barber Lane and McCarthy Boulevard.
BAR-SYC	1975054.694	6151671.573	24.295	Brass disk in monument well at intersection, Barber Lane and Sycamore Drive.
BB-SPV			95.150	Brass disk in monument well at intersection, Big Basin Drive and South Park Victoria Drive.
BEL-MCC			19.016	Brass disk in monument well at intersection, Bellew Drive and McCarthy Boulevard.
BER-PAC			24.177	Chiseled square, top of south end of east abutment of pedestrian bridge over Berryessa Creek at Pacheco Drive.
BER-REF			25.799	Chiseled square, north top of curb at east end, Paseo de Refugio bridge over Berryessa Creek.
BOL-NPV			145.364	Brass disk in monument well at intersection, Bolton Drive and North Park Victoria Drive.
BUC-SYC			26.997	Brass disk in monument well at intersection, Buckeye Drive and Sycamore Drive.

Point Name	CCS83(199	92) Zone 3	Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
BUR-TEM			100.997	3/4" IP in monument well at intersection, Temple Drive and Burley Drive west (Southerly monument).
CAL-CAR RESET			68.509	1 1/8" brass disk stamped Towill Inc. set in the top curb on the northerly side of Calaveras Road, located 55' easterly of the centerline of Carnegie.
CAL-DEM			47.525	Chiseled square, south top of curb, East Calaveras Boulevard and Dempsey Way.
CAL-EVA RESET			126.554	Brass disk in monument well
CAL-GAD			79.737	3/4" IP in monument well, 10' south of C/L, East Calaveras Boulevard at intersection, East Calaveras Boulevard and Gadsden Drive (southerly monument).
CAL-HH2			22.334	Cut "X" on north bolt of electrolier base, south curb line of East Calaveras Boulevard, 115'+ west of intersection, of C/L Hetch Hetchy water line and East Caleveras Boulevard, 0.2 miles east of Milpitas.
CAL-HIL	1983354.038	6157123.244	26.005	Brass disk in monument well at intersection, East Calaveras Boulevard and Hillview Drive.
CAL-MIL	1982912.586	6155320.091	19.231	Brass disk in monument well at intersection, Calaveras Boulevard and Milpitas Boulevard.
CAL-PIE			145.772	1" IP in monument well at intersection, Calaveras Road and Piedmont Road.
CAL-PV	1984042.675	6159765.947	54.185	Brass disk under 18" steel plate at intersection, East Calaveras Boulevard and Park Victoria Drive (Easterly disk of two).
CAL-RR			17.659	Chiseled square on top of catch basin, north side of Railroad Avenue, 800' + West of intersection, Calaveras Boulevard and Milpitas Boulevard, 135' + easterly of main line, WPRR.
CAL-TEM	1984670.012	6162188.906	103.234	3/4" IP in monument well at intersection, East Calaveras Boulevard and Temple Drive.
CAL-VIS 1999			404.445	3/4" IP in monument well
CAM-JAC RESET	1988184.868	6155877.235	22.544	1 1/8" Towill disk set at the top NW corner of Jacklin and Campbell in the top of the curb, located 10' east along the Jacklin curb line from a catch basin.
CAN-TEM			96.449	3/4" IP in monument well at intersection, Canton Drive and Temple Drive (Centerline monument of Temple Drive).
CAP-MAI			30.076	Brass disk in monument well at intersection, Capitol Avenue and South Main Street.
CAP-RR			49.433	Brass disk in monument well C/L Capitol Avenue 105' + southeast of C/L WPRR.

Point Name	CCS83(199	92) Zone 3	Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
CAR-MAI (new)			13.727	Brass Disk on east top of curb at southeast curb return, South Main Street at Carlo Street. Set December 2005.
CAR-MAI (removed)			13.666	Chiseled square on east top of curb at southeast curb return, South Main Street at Carlo Street. Removed
CAR-YOS			68.885	Brass disk in monument well at intersection, Carnegie Drive and Yosemite Drive. (C/L monument of Carnegie Drive).
CC-CLUB			438.413	Chiseled square, northeast corner of concrete slab with electric transformer, 40' north of northeast corner, Country Club Restaurant.
CC-NPV			46.188	Brass disk in monument well at intersection, North Park Victoria Drive and Country Club Drive.
CC-PUMP	1990215.765	6159360.177	220.821	Brass disk in monument well, 0.2 mile east of intersection, North Park Victoria Drive and Country Club Drive, 50+ north of pumping station.
CC-TUL			433.618	Brass disk in monument well at intersection, Country Club Drive and Tularcitos Drive (monument is 32' east of B.C. monument of Country Club Drive, 25' north of C/L monument, Tularcitos Drive, 7' northerly of SS manhole).
CDH-L-539			85.642	Brass disk in monument well
CED-MAI	1974146.434	6154253.686	33.940	Brass disk in monument well at intersection, Cedar Way and South Main Street.
CLL-LAN			119.203	1/2" brass pin in concrete at intersection, Clear Lake Avenue and Landess Avenue.
CON-DIX	1993005.107	6154127.444	81.817	Brass disk in monument well, Conway Street southbound and Dixon Road.
CON-GOS			79.951	Pin in concrete in monument well at intersection, Conway Street and Gosser Street.
CON-MAN			84.209	Pin in concrete in monument well at intersection, Conway Street and Manferd Street.
CO-NPV			36.583	Brass disk in monument well at intersection, Calle Oriente and North Park Victoria Drive.
СОТ-МСС			30.477	Brass disk in monument well at intersection, McCarthy Boulevard and Cottonwood Drive.
CRE-NPV			35.218	Brass disk in monument well at intersection, Creed Street and Park Victoria Drive.
CRL-SEQ			103.968	Brass disk in monument well at intersection, Crater Lake Avenue and Sequoia Drive.
CUR-DIE			89.986	Brass disk in monument well at intersection, Curtner Drive and Diel Drive.
DEN-TEM			86.647	Brass disk in monument well at intersection, Dennis Avenue and North Temple Drive.

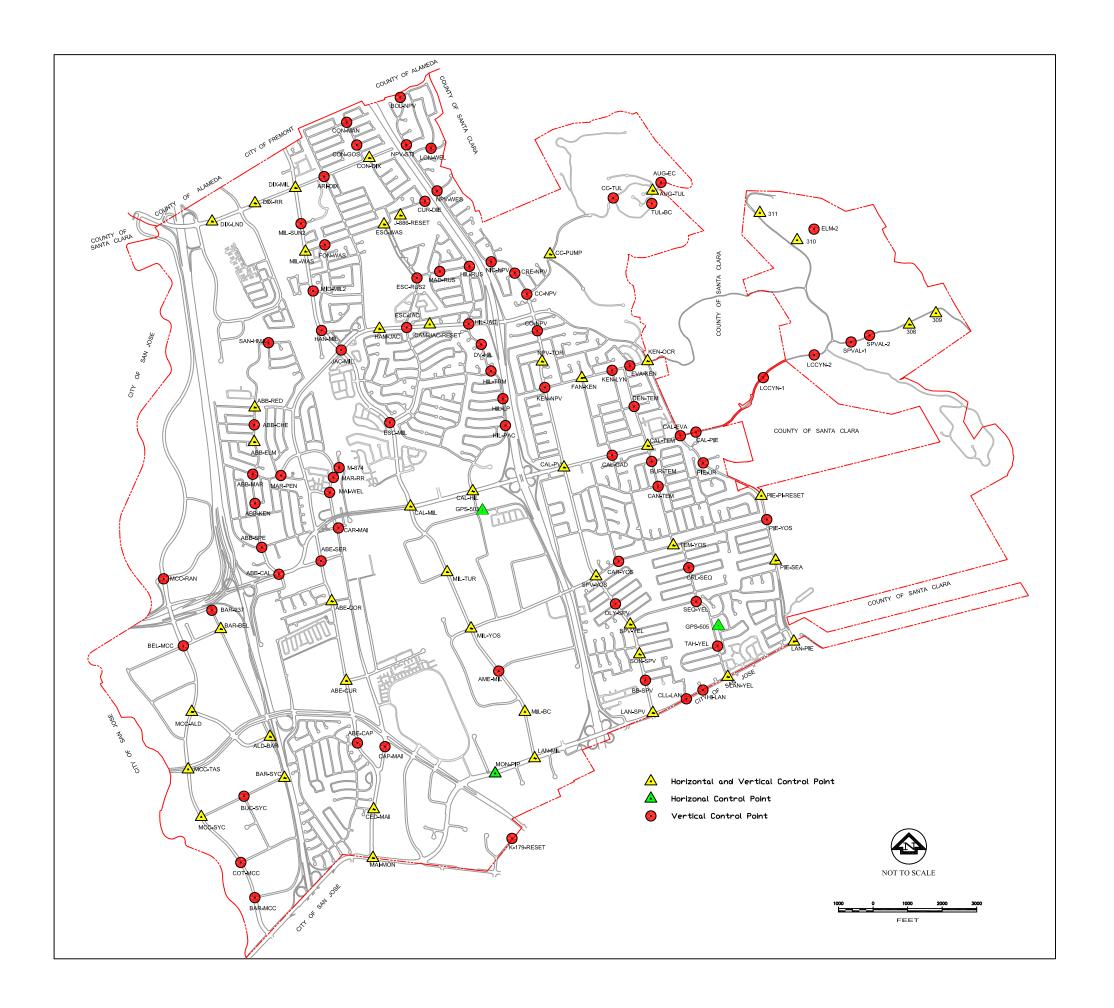
Point Name	CCS83(199	92) Zone 3	Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
DIX-LND	1991164.846	6149574.614	8.263	Brass disk in monument well, 90' + east of C/L PG&E tower line.
DIX-MIL	1992136.295	6151988.203	30.955	Brass disk in monument well
DIX-RR	1991693.688	6150817.253	17.232	Brass disk in monument well, Dixon Landing Road 120' + east of WPRR tracks.
DOW-1A			447.060	Chiseled square on south end concrete headwall, east side of Downing Road 650'+ north of intersection, Calaveras Road and Downing Road (Reset- 1992).
DOW-OCR2 RESET			493.594	Rebar and cap in the asphalt, set in the intersection of Dowinig Road and Old Calaveras Road, located on the centerline of Dowing in the northerly part of the intersection at the junction of the double yellow stripe and the stop bar by the gate to Ed Levin CountyPark.
DV-HIL			23.215	Brass disk in monument well at intersection, Del Valle Court and Hillview Drive.
EDS-SPV RESET			53.266	1 1/8" brass disk stamped Towill Inc. set in the top curb, in the bus stop, at the NE corner of Edsel Drive and South Park Victoria, 21' northerly of the traffic signal/electrolier.
ELM-1 RESET			552.103	Rebar and cap set in the asphalt, on the centerline of the entrance road to the Elm Picnic area, 500' northerly of the park entrance kiosk. 300' northerly of Downing Road and 17.3' southeast of a power pole.
ELM-2			577.537	Chiseled square, northwest corner of dissipater structure, concrete spillway, south side Sandy Wool Lake.
ESC-JAC			21.660	Chiseled square on south top of curb of Jacklin Road at southeast curb return, Escuela Parkway and Jacklin Road.
ESC-MIL			12.857	Brass disk in monument well at intersection, Escuela Parkway and North Milpitas Boulevard.
ESC-RUS2			41.874	Chiseled square on top of curb of median island, north line of Russell Lane, C/L of Escuela Parkway.
ESC-WAS	1991080.933	6154555.226	56.362	Brass disk in monument well at intersection, Escuela Parkway southbound and Washington Drive.
EVA-KEN			91.349	Brass disk in monument well at intersection, Evans Road and Kennedy Drive.
FAN-KEN RESET	1986631.539	6160282.536	58.828	Chiseled Cross in Rim
FON-WAS			27.175	Brass disk in monument well at intersection, Fontainbleu Avenue and Washington Drive.
G-554 RESET 1995			28.994	USC&GS Brass disk
GLA-MON			55.003	Brass disk in monument wall at intersection, Gladding Court and Montague Expressway (In Median).

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	Northing	Easting	NGVD29	
GPS 503	1982796.257	6157405.242	0.000	2" aluminum Towill disk stamped GPS 503 and set in the top of wall on bridge abutment on NW corner of Los Coches street bridge, located 175' 6 east northeast of Hillview Dr., 650' 6 south southeast of Calaveras Blvd, 6.5' NW of SCVWD "No Trespassing" sign.
GPS 505	1979457.632	6164238.042	0.000	The station is a city monument located at the cul-de-sac at the end of eagle ridge way. The station is a brass disk set in concrete with no stamp, in a monument well.
HAM-JAC	1988058.068	6154421.958	18.111	Brass disk in monument well at intersection, Hamilton Avenue and Jacklin Road.
HAN-MIL			16.551	Brass disk in monument well at intersection, Hanson Court and North Milpitas Boulevard.
HI-LAN			128.038	1/2" brass pin in concrete at intersection, Highland Court and Landess Avenue.
HIL-JAC			22.445	Brass disk in monument well at intersection, Hillview Drive and Jacklin Road.
HIL-LP			27.062	Brass disk in monument well at intersection, Hillview Drive and Las Positas Drive.
HIL-PAC			30.215	Brass disk in monument well at intersection, Hillview Drive and Pacheco Drive.
HIL-RUS			42.087	Brass disk in monument well at intersection, Hillview Drive and Russell Lane (southerly monument of two Monuments).
HIL-TRM			22.967	Brass disk in monument well at intersection, Hillview Drive and Tramway Drive.
J-886 Reset 1961	1991339.193	6155027.924	69.463	USC&GS Brass disk
JAC-680			24.856	Chiseled square on North top of curb, Jacklin Road beneath southbound roadway bridge, I-680.
JAC-MIL			12.747	Brass disk in monument well at intersection, Jacklin Road and North Milpitas Boulevard.
K-179 RESET 1969			49.140	U.S.C. & G.S. brass disk in top of north end of west headwall, WPRR culvert crossing of Penitencia Creek, north of Lundy Road.
KEN-LYN			73.025	Brass disk in monument well at intersection, Kennedy Drive and Lynn Avenue.
KEN-NPV			42.977	Brass disk in monument well at intersection, Kennedy Drive and North Park Victoria Drive.
KEN-OCR	1987122.136	6162187.816	121.781	Brass disk in monument well at intersection, Kennedy Drive. Old Calaveras Road and Evans Road at north side existing Kennedy Drive.
LAN-MIL	1975624.788	6158915.573	60.134	Brass disk in monument well at intersection, Landess Avenue (Montague Expressway) and South Milpitas Boulevard.
LAN-PIE			203.139	Chiseled square on south top of curb, Landess Avenue southwest curb return, Landess Avenue and (new) Piedmont Road.

Point Name	CCS83(199	92) Zone 3	Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
LAN-SPV	1976935.463	6162339.526	102.336	Brass disk in monument well, C/L South Park Victoria Drive 50' + north of C/L Landess Avenue.
LAN-YEL	1977980.488	6164505.578	141.575	Brass disk in monument well at intersection, Landess Avenue and Yellowstone Avenue.
LCCYN-1 RESET			304.681	The station is a rebar and cap set in the asphalt on the southerly side of Calaveras Road. It is located 80' westerly of the driveway to house number 2360 and 7.5' west of power pole number 82. It is 7.0' northerly of the edge of the pavement.
LON-WEL			128.711	Brass disk in monument well at intersection, London Drive and Wellington Drive, 5' + westerly of C/L Wellington (middle monument of three monuments).
M-874			13.016	U.S.C. & G.S. brass disk in top of north end of west concrete headwall of quadruple 60" CMP culvert, Railroad Avenue 0.1 mile north of SPRR crossing.
MAD-RUS			42.745	Brass disk in monument well at intersection, Madalen Drive and Russell Lane.
MAI-MON	1972735.814	6154233.505	35.126	Brass disk in monument well, 35' east of C/L/ Main Street at intersection, South Main Street and Montague Expressway.
MAI-WEL			12.237	Brass disk in monument well at intersection, North Main Street and Weller Lane.
MAR-PEN			11.335	Brass disk in monument well on Penitencia Street, 5' south of intersection, Marylinn Drive and Penitencia Street
MAR-RR			14.204	Brass disk in monument well at E.C. of Railroad Avenue, 360' north of intersection, Railroad Avenue and Marylinn Drive.
MCC-RAN			17.102	Brass disk in monument well at intersection, McCarthy Boulevard and Ranch Road.
MCC-SYC	1973923.811	6149263.597	26.250	Brass disk in monument well at intersection, McCarthy Boulevard and Sycamore Drive.
MCC-TAS	1975301.424	6148882.287	23.895	Brass disk in monument well at intersection, McCarthy Boulevard and Tasman Drive (two northerly monuments.).
MID-MIL2			16.750	Cut cross on bolt of electrolier base at northeast corner Midwick Drive and North Milpitas Boulevard.
MIL-BC	1976966.733	6158634.219	52.536	Brass disk in monument well at C/L B.C. of South Milpitas Boulevard, 1600'+ north of intersection, Landess Avenue and South Milpitas Boulevard.
MIL-LCO			18.365	Brass disk in monument well at intersection, South Milpitas Boulevard and Las Coches Street.
MIL-SUN2			27.394	Brass disk in monument well at intersection, North Milpitas Boulevard and Sunnyhills Court.

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MIL-TRM2 RESET			11.683	Chiseled Square
MIL-TUR	1981013.844	6156381.329	22.274	Brass disk in monument well at intersection, South Milpitas Boulevard and Turquoise Street.
MIL-WAS	1990293.514	6152278.190	21.607	Brass disk in monument well at intersection, North Milpitas Boulevard and Washington Drive.
MIL-YOS	1979382.076	6157074.452	28.939	Brass disk in monument well at intersection, South Milpitas Boulevard and Yosemite Drive.
MON-PEN			38.810	Chiseled square at north end of headwall, west side of Montague Expressway at Penitencia Creek.
MON-PIP			47.675	Brass disk in monument well 100' + east of C/L Piper Drive at C/L E.C. Montague Expressway.
NIC-NPV			41.553	Brass disk in monument well at intersection, North Park Victoria Drive and Nicklaus Avenue.
NPV-STI			112.056	Brass disk in monument well at intersection, North Park Victoria Drive and Stirling Drive.
NPV-TOR	1987109.285	6159130.362	40.721	Brass disk in monument well at intersection, North Park Victoria Drive and Torres Avenue.
NPV-WES			101.637	Brass disk in monument wall at intersection, North Park Victoria Drive and Wessex Place.
OLY-SPV			76.428	Brass disk in monument well at intersection, Olympic Drive and South Park Victoria Drive.
PGE-536			6.917	Chiseled square on northeast concrete support, PG&E high tension tower #5-36, 1000' + south along tower line from Dixon Landing Road.
PGE-538			9.257	Chiseled square on northeast concrete support, PG&E high tension tower #5-38, 2500' + south along tower line from Dixon Landing Road.
PIE-PI RESET	1983220.321	6165480.480	217.745	Rebar and Towill, Inc cap set in the asphalt near the point of intersection of the curve in Piedmont, located 900' northerly of Yosemite Drive and 90' north of DWR manhole number 3849. It is 7' west of the edge of the pavement and 50' northwest of a JT pole.
PIE-SEA RESET	1981346.064	6165894.056	201.228	Rebar & Towill Cap
PIE-UR RESET			141.961	Brass disk in monument well
PIE-YOS			192.939	Brass disk in monument well at intersection, Piedmont Road and Yosemite Drive.
ROS-YOS			79.999	Brass disk in monument well at intersection, Roswell Drive and Yosemite Drive.

Point Name CCS83(1992) Zone 3		92) Zone 3	Differential Levels (US Survey Feet)	Description
	Northing	Easting	NGVD29	
SAN PEDRO	1954402.381	6152725.497	0.000	3D Rod Monument in monument well near the intersection of Younger and San Pedro streets, 126' South of the south curb of Younger St., 28' west of the C/L of San Pedro St.
SEQ-YEL			114.918	Brass disk in monument well at intersection, Sequoia Drive and Yellowstone Avenue.
SON-SPV	1978633.763	6161950.931	93.678	Brass disk in monument well at intersection, South Park Victoria Drive and Sonoma Drive.
SPVAL-1			436.112	3/4" IP in monument well, Calaveras Road 550' east of intersection, Calaveras Road and Downing Road, 50'+ west of easterly exit from parking lot.
SPVAL-2 RESET			477.531	Square head bolt in concrete in monument well in the West-bound lane of Calaveras Road, 1150' East of the intersection of Calaveras Road and Downing Road
SPVAL-3 RESET			541.227	The station is a rebar and cap in the asphalt, set on the edge of the traveled way/white strip on the southerly side of the Calaveras Road. It is located 500' westerly of the entrance to Spring Valley Golf Course, 4' north of and opposite of power pole number 108.
SPV-YEL	1979496.629	6161683.800	86.759	Brass disk in monument well at intersection, South Park Victoria Drive and Yellowstone Avenue, 6' North of C/L Yellowstone Avenue.
SPV-YOS	1980892.979	6160693.729	62.548	Brass disk in monument well at intersection, South Park Victoria Drive and Yosemite Drive.
SWL-1			593.767	Chiseled square, northwest corner of northwest concrete slab at boat dock, picnic area, northeast side Sandy Wool Lake.
SWL-2			589.846	Chiseled square, northwest corner of headwall, north side of Downing Road, 175'+ northeast of northwest parking area exit (also 175' Northeast of paved road heading northerly).
TAH-YEL			132.778	Brass disk in monument well at intersection, Tahoe Drive and Yellowstone Avenue.
TEM-WYL			91.216	3/4" IP in monument well at intersection, Temple Drive and Wylie Drive.
TEM-YOS	1981788.506	6162933.958	93.929	Brass disk in monument well at intersection, Temple Drive and Yosemite Drive.
TUL-BC			551.464	Brass disk at monument line B.C. Tularcitos Drive, 250' + north of water tank.
455	5			



CITY OF MILPITAS ENGINEERING DIVISION BENCHMARK SYSTEM

February 21, 2002